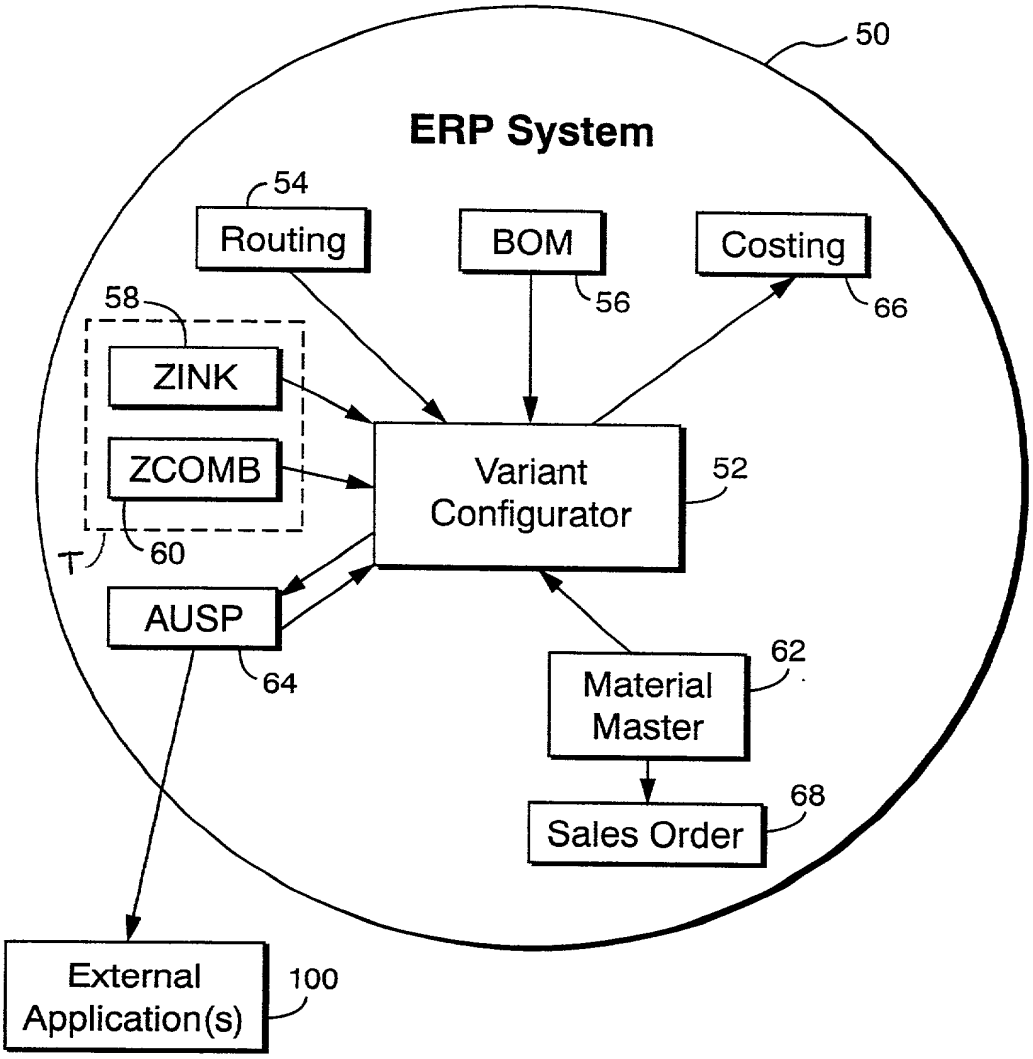

Fig. 1
(Prior Art)

TOMZIO" 8T289260

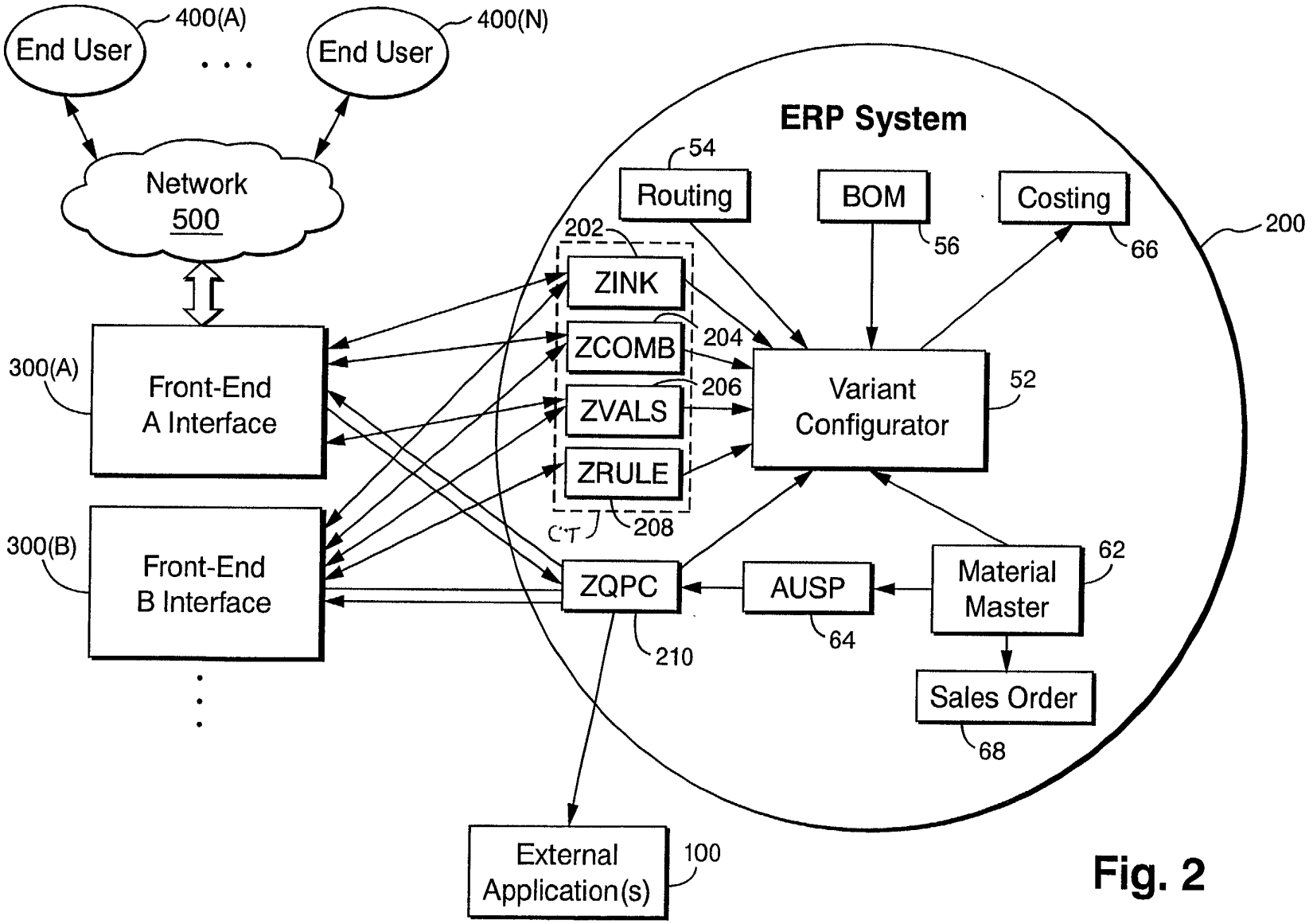

Fig. 2

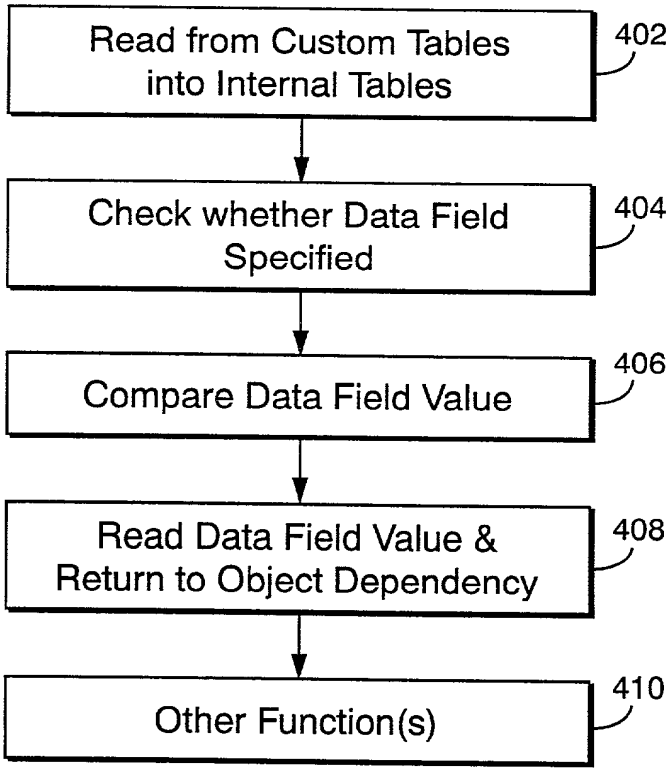

Fig. 2A

Example Variant Functions

Field name	Data element	Type	Length	Short text
ID	**ZID**	**NUMC**	**10**	**Configuration ID**
CUSTID	KUNNR	CHAR	10	Customer number
NAME	ZFRMNAME	CHAR	10	Form name
NUMBER	ZFRMNUM	CHAR	40	Form number
PRODUCT	ZPRODUCT	CHAR	2	Product ID
OWNER	ZOWNER	CHAR	8	Owner (person responsible)
COMBINED	ZCOMBINED	CHAR	10	Combined order key

Fig. 3 Example ZHEAD Table

Field name	Data element	Type	Length	Short text
ID	**ZID**	**NUMC**	**10**	**Configuration ID**
EFFECTIVE	**ZEFFDATE**	**DATS**	**8**	**Effective date**
DESCRIPT	ZVERDESC	CHAR	30	Configuration version descript
STATUS	ZSTATUS	CHAR	10	Configuration status
PARTS	ZPARTS	DEC	2	Number of parts
QTY	ZORDQTY	DEC	9	Order quantity
TOLERANCE	ZTOLERANCE	CHAR	1	Run quantity tolerance
LENGTH	ZFRMLENGTH	DEC	10	Form length
WIDTH	ZFRMWIDTH	DEC	10	Form width
FACECOMP	ZFACECOMP	CHAR	1	Type of face composition
BACKCOMP	ZBACKCOMP	CHAR	1	Type of back composition
PROOFTYPE	ZPROOFTYPE	CHAR	1	Type of proof
PROOFCOUNT	ZPROOFCNT	DEC	2	Number of proofs
BASEINK	ZBASEINK	CHAR	2	Base ink type
HOLE1TYPE	ZHOLETYPE	CHAR	5	Hole type
HOLE1SIZE	ZHOLESIZE	CHAR	10	Hole size
HOLE1EDGE	ZHOLEEDGE	CHAR	5	Hole edge distance
HOLE1PLACE	ZHOLEPLACE	CHAR	1	Hole placement
HOLE1CLEAR	ZHOLECLEAR	CHAR	1	Hole clear through
HOLE1APPLY	ZAPPLY	CHAR	1	Applied at
HOLE2TYPE	ZHOLETYPE	CHAR	5	Hole type
HOLE2SIZE	ZHOLESIZE	CHAR	10	Hole size
HOLE2EDGE	ZHOLEEDGE	CHAR	5	Hole edge distance
HOLE2PLACE	ZHOLEPLACE	CHAR	1	Hole placement
HOLE2CLEAR	ZHOLECLEAR	CHAR	1	Hole clear through

Fig. 4A Example ZFORM Table

Field name	Data element	Type	Length	Short text
HOLE2APPLY	ZAPPLY	CHAR	1	Applied at
HOLE3TYPE	ZHOLETYPE	CHAR	5	Hole type
HOLE3SIZE	ZHOLESIZE	CHAR	10	Hole size
HOLE3EDGE	ZHOLEEDGE	CHAR	5	Hole edge distance
HOLE3PLACE	ZHOLEPLACE	CHAR	1	Hole placement
HOLE3CLEAR	ZHOLECLEAR	CHAR	1	Hole clear through
HOLE3APPLY	ZAPPLY	CHAR	1	Applied at
PUNCHCOPY	ZPUNCHCOPY	CHAR	1	Punches through copy permitted
NUM1TYPE	ZNUMTYPE	CHAR	5	Number type
NUM1CHECK	ZNUMCHECK	CHAR	3	Number check digit type
NUM1COLOR	ZNUMCOLOR	CHAR	6	Number ink color
NUM1DIGITS	ZNUMDIGITS	NUMC	2	Number of digits in number
NUM1QTY	ZNUMQTY	NUMC	1	Number quantity on part
NUM1PLACE	ZNUMPLACE	CHAR	1	Number placement
NUM1CLEAR	ZNUMCLEAR	CHAR	1	Number clear through
NUM1START	ZNUMSTART	CHAR	12	Number starting number
NUM1LASTUP	ZNUMLASTUP	CHAR	1	Number last & up
NUM1APPLY	ZAPPLY	CHAR	1	Applied at
NUM2TYPE	ZNUMTYPE	CHAR	5	Number type
NUM2CHECK	ZNUMCHECK	CHAR	3	Number check digit type
NUM2COLOR	ZNUMCOLOR	CHAR	6	Number ink color
NUM2DIGITS	ZNUMDIGITS	NUMC	2	Number of digits in number
NUM2QTY	ZNUMQTY	NUMC	1	Number quantity on part
NUM2PLACE	ZNUMPLACE	CHAR	1	Number placement
NUM2CLEAR	ZNUMCLEAR	CHAR	1	Number clear through
NUM2START	ZNUMSTART	CHAR	12	Number starting number
NUM2LASTUP	ZNUMLASTUP	CHAR	1	Number last & up
NUM2APPLY	ZAPPLY	CHAR	1	Applied at
NUM3TYPE	ZNUMTYPE	CHAR	5	Number type
NUM3CHECK	ZNUMCHECK	CHAR	3	Number check digit type
NUM3COLOR	ZNUMCOLOR	CHAR	6	Number ink color
NUM3DIGITS	ZNUMDIGITS	NUMC	2	Number of digits in number
NUM3QTY	ZNUMQTY	NUMC	1	Number quantity on part
NUM3PLACE	ZNUMPLACE	CHAR	1	Number placement
NUM3CLEAR	ZNUMCLEAR	CHAR	1	Number clear through
NUM3START	ZNUMSTART	CHAR	12	Number starting number
NUM3LASTUP	ZNUMLASTUP	CHAR	1	Number last & up

Fig. 4B Example ZFORM Table

Field name	Data element	Type	Length	Short text
NUM3APPLY	ZAPPLY	CHAR	1	Applied at
MISSING	ZMISSING	CHAR	1	Missing numbers allowed
CRITICAL	ZCRITICAL	CHAR	1	Critical numbering
DESCENDING	ZDESCEND	CHAR	1	Descending numbers
IPKGTYPE	ZPKGTYPE	CHAR	1	Package type
OPKGTYPE	ZPKGTYPE	CHAR	1	Package type
OPKGMATNR	ZPKGMATNR	CHAR	18	Packaging material number
OPKGBURST	ZPKGBURST	NUMC	3	Required package burst strength
MINWEIGHT	ZPKGWEIGHT	NUMC	3	Package weight
MINKEIGHT	ZPKGWEIGHT	NUMC	3	Package weight
OPKGWEIGHT	ZPKGWEIGHT	NUMC	3	Package weight
OPKGBURST	ZPKGSTACKS	NUMC	3	Packaging stacks
OPKGQTY	ZPKGQTY	NUMC	6	Quantity of forms per package
IPKGQTY	ZPKGQTY	NUMC	6	Quantity of forms per package
TIPIMATNR	ZMATNR	CHAR	18	Material number
TIPIQTY	ZTIPQTY	NUMC	6	Tipon quantity
TIP2MATNR	ZMATNR	CHAR	18	Material number
TIP2QTY	ZTIPQTY	NUMC	6	Tipon quntity
WEIGHT	ZWT	NUMC	3	Weight
THICKNESS	ZTHICKNESS	NUMC	3	Thickness
OPKGQTYMB	ZMUSTBE	CHAR	1	Must be
IPKGQTYMB	ZMUSTBE	CHAR	1	Must be
WEIGHTMB	ZMUSTBE	CHAR	1	Must be
CALIPERMB	ZMUSTBE	CHAR	1	Must be
IMAGETYPE	ZIMAGETYPE	CHAR	1	Imaging type
IMAGEWIDE	ZNBRWIDE	NUMC	2	Number wide
IMAGEPASS	ZPASSES	NUMC	1	Number of passes thru press
IMAGEAPPLY	ZAPPLY	CHAR	1	Applied at
IPKGAPPLY	ZAPPLY	CHAR	1	Applied at
TIP1APPLY	ZAPPLY	CHAR	1	Applied at
TIP2APPLY	ZAPPLY	CHAR	1	Applied at
CBNAPPLY	ZAPPLY	CHAR	1	Applied at
DCUTAPPLY	ZAPPLY	CHAR	1	Applied at
MFGMETHOD	ZMFGMETHOD	CHAR	1	Manufacturing method
COLLATWIDE	ZNBRWIDE	NUMC	2	Number wide
INFO1	INFNR	CHAR	10	Purchasing information record
INFO2	INFNR	CHAR	10	Purchasing information record

Fig. 4C Example ZFORM Table

Field name	Data element	Type	Length	Short text
INFO3	INFNR	CHAR	10	Purchasing information record
TANDEMSETS	ZNUM	NUMC	2	Number
NUMAROUND	ZNUM	NUMC	2	Number
BURSTING	ZBURSTING	CHAR	1	Burst into singles
MWORDTYPE	ZMWORDTYPE	CHAR	1	Marginal word type
MWORDCOLOR	ZMISCCOLOR	CHAR	6	Miscellaneous color
COVERSTYLE	ZCOVSTYLE	CHAR	2	Cover style
COVERSTOCK	ZCOVSTOCK	CHAR	2	Cover stock
COVERMATNR	ZCOVSTOCK	CHAR	2	Cover stock
COVERPRINT	ZCOVPRINT	CHAR	2	Cover printing
COVERNUM	ZCOVNUM	CHAR	2	Cover numbering
COVERNUMC	ZMISCCOLOR	CHAR	6	Miscellaneous color
COVERINKC	ZMISCCOLOR	CHAR	6	Miscellaneous color
COVERDCUT	ZYES	CHAR	1	Yes or Null
STUBTAPE	ZYES	CHAR	1	Yes or Null
BOOKQTY	ZBOOKQTY	NUMC	3	Quantity stitched per book
GUMQTY	ZGUMQTY	NUMC	3	Quantity per gummed pad
GUMPLACE	ZGUMPLACE	CHAR	1	Placement of gumming
GENERAL	ZTAB	CHAR	1	Tab Status
PAPER	ZTAB	CHAR	1	Tab Status
INK	ZTAB	CHAR	1	Tab Status
PUNCHING	ZTAB	CHAR	1	Tab Status
NUMBERING	ZTAB	CHAR	1	Tab Status
PERF	ZTAB	CHAR	1	Tab Status
COMP	ZTAB	CHAR	1	Tab Status
PACKAGING	ZTAB	CHAR	1	Tab Status
PRODUCTION	ZTAB	CHAR	1	Tab Status
CREATEDON	ZCREDATE	DATS	8	Created date
CREATEDBY	ZCREATEDBY	CHAR	8	Person created by
NOTES	ZSPIN	CHAR	255	Special instructions

Fig. 4D Example ZFORM Table

Field name	Data element	Type	Length	Short text
ID	**ZINDEX**	**CHAR**	**18**	**Configuration ID**
EFFECTIVE	**ZEFFDATE**	**DATS**	**8**	**Effective date**
PART	**ZPARTS**	**NUMC**	**2**	**Part number**
MATNR	ZMATNR	CHAR	18	Material number
COMB0	GROES	CHAR	32	Paper grade, weight, color
WIDTH	ZPARTWIDTH	DEC	10	Part width
LENGTH	ZPARTLEN	DEC	10	Part length
PROCOLOR	ZPROCOLOR	CHAR	1	Process colors
INK1COLOR	ZINK	CHAR	6	Ink color code
INK2COLOR	ZINK	CHAR	6	Ink color code
INK3COLOR	ZINK	CHAR	6	Ink color code
INK4COLOR	ZINK	CHAR	6	Ink color code
INK5COLOR	ZINK	CHAR	6	Ink color code
INK6COLOR	ZINK	CHAR	6	Ink color code
INK7COLOR	ZINK	CHAR	6	Ink color code
INK8COLOR	ZINK	CHAR	6	Ink color code
INK1COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK2COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK3COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK4COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK5COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK6COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK7COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK8COVER	ZCOVERAGE	NUMC	3	Ink coverage
INK1COPY	ZCOPY	CHAR	6	Ink copy
INK2COPY	ZCOPY	CHAR	6	Ink copy
INK3COPY	ZCOPY	CHAR	6	Ink copy
INK4COPY	ZCOPY	CHAR	6	Ink copy
INK5COPY	ZCOPY	CHAR	6	Ink copy
INK6COPY	ZCOPY	CHAR	6	Ink copy
INK7COPY	ZCOPY	CHAR	6	Ink copy
INK8COPY	ZCOPY	CHAR	6	Ink copy
INKBACKER	ZBACKER	CHAR	1	Ink backer type
INKBACKERS	ZBACKERS	NUMC	1	Number of backer inks
COPYBLEED	ZCOPYBLEED	CHAR	2	Copy bleeds
HOLE1	ZFEATURE	CHAR	1	Feature
HOLE2	ZFEATURE	CHAR	1	Feature

Fig. 5A Example ZPAR Table

Field name	Data element	Type	Length	Short text
HOLE3	ZFEATURE	CHAR	1	Feature
NUM1	ZFEATURE	CHAR	1	Feature
NUM2	ZFEATURE	CHAR	1	Feature
NUM3	ZFEATURE	CHAR	1	Feature
NUMBERWIDE	ZNBRWIDE	NUMC	2	Number wide
PASSES	ZPASSES	NUMC	1	Number of passes thru press
PRESSPULL	ZPRESSPULL	CHAR	1	Pull direction through press
MFGWIDTH	ZMFGWIDTH	DEC	10	Manufacturing width
LMARGTYPE	ZMARGTYPE	CHAR	1	Margin type
LMARGSIZE	ZMARGSIZE	DEC	10	Margin size
RMARGTYPE	ZMARGTYPE	CHAR	1	Margin type
RMARGSIZE	ZMARGSIZE	DEC	10	Margin size
HPERFSFULL	ZPERFS	NUMC	1	Perforations
HPERFSPART	ZPERFS	NUMC	1	Perforations
VPERFSFULL	ZPERFS	NUMC	1	Perforations
VPERFSPART	ZPERFS	NUMC	1	Perforations
MARGINHOLE	ZMARGINAL	CHAR	2	Marginal punching
CBNCOMBO	GROES	CHAR	32	Paper grade, weight, color (fo
CBNWIDTH	ZCBNWIDTH	DEC	10	Carbon width
CBNPATTERN	ZPATTERN	CHAR	1	Pattern
CBNEXTRAS	ZMISCEXTRA	NUMC	1	Miscellaneous extras
OPQCOLOR	ZMISCCOLOR	CHAR	1	Miscellaneous color
OPQPATTERN	ZPATERN	CHAR	1	Pattern
TIP1	ZFEATURE	CHAR	1	Feature
TIP2	ZFEATURE	CHAR	1	Feature
TTAPE	ZFEATURE	CHAR	1	Feature
RTAPE	ZFEATURE	CHAR	1	Feature
RGLUE	ZFEATURE	CHAR	1	Feature
DCUT	ZFEATURE	CHAR	1	Feature
IMAGETYPE	ZIMAGETYPE	CHAR	1	Imaging type
IMAGEWIDE	ZNBRWIDE	NUMC	2	Number wide
IMAGEPASS	ZPASSES	NUMC	1	Number of passes thru press
IMAGEAPPLY	ZAPPLY	CHAR	1	Applied at
MWORD	ZMWORD	CHAR	30	Marginal words

Fig. 5B Example ZPAR Table

Field name	Data element	Type	Length	Short text
ZINK	**ZINK**	**CHAR**	**6**	**Ink color code**
ZINK_PMS	ZINK_PMS	CHAR	10	Ink PMS
ZINK_SHADE	ZINK_SHADE	CHAR	10	Ink shade
ZINK_DESC	ZINK_DESC	CHAR	30	Ink description

Fig. 6 Example ZINK Table

Field name	Data element	Type	Length	Short text
ID	**ZID**	**NUMC**	**10**	**Configuration ID**
EFFECTIVE	**ZEFFDATE**	**DATS**	**8**	**Effective date**
CATEGORY	ZFEATURE	CHAR	1	Feature
FTYPE	ZFEATTYPE	CHAR	1	Feature type
XSTART	ZCOORD	DEC	5	Coordinate
YSTART	ZCOORD	DEC	5	Coordinate
XEND	ZCOORD	DEC	5	Coordinate
YEND	ZCOORD	DEC	5	Coordinate
FROMPART	ZPART	NUMC	2	Part
TOPART	ZPART	NUMC	2	Part
BACK	ZYES	CHAR	1	YES or NULL
CLEAR	ZCLEAR	CHAR	1	Clear through

Fig. 7 Example ZFEAT Table

Field name	Data element	Type	Length	Short text
COMBO	**GROES**	**CHAR**	**32**	**Paper grade, weight, color**
GRADE	ZGRADE	CHAR	15	Paper grade
WIEGHT	ZWEIGHT	CHAR	7	Paper weight
COLOR	ZCOLOR	CHAR	6	Paper color
MAT_GROUP	MATKL	CHAR	9	Material group
EXT_CODE	ZEXT_CODE	CHAR	8	External system grade code
PAP_GROUP	ZPAP_GROUP	CHAR	30	Paper group
ADH1	ZADHESIVE1	CHAR	30	Paper adhesive coating 1
ADH2	ZADHESIVE2	CHAR	30	Paper adhesive coating 2
V	ZV	CHAR	30	Usage code
RECYCLED	ZRECYCLED	CHAR	1	Recycled paper
REC_PCNT	ZREC_PCNT	CHAR	3	Recycled post consumer %
REAM	ZREAM	CHAR	30	Paper ream size
MSI	ZMSI	CHAR	7	Pounds per 1000 square inches
CALIPER	ZCALIPER	CHAR	7	Paper caliper
MILL	ZMILL	CHAR	15	Paper mill
ENGLISH		CHAR	40	English description
FRENCH		CHAR	40	French description
C1		CHAR	1	Quick print continuous 1 part
CM		CHAR	1	Quick print continuous 2+ part

Fig. 8 Example ZCOMB Table

Field name	Data element	Type	Length	Short text
DATAELEM		**CHAR**	**10**	**Data element**
VALUE		**CHAR**	**10**	**Value code**
ENGLISH		CHAR	40	English description
FRENCH		CHAR	40	French description
EDOCKET		CHAR	10	English docket description
FDOCKET		CHAR	10	French docket description
C1		CHAR	1	Quick print continuous 1 part
CM		CHAR	1	Quick print continuous 2+ part

Fig. 9 Example ZVALS Table

Field name	Data element	Type	Length	Short text
FIELDNAME	**ZFIELDNAME**	**CHAR**	**10**	**Field name**
PRODUCT	**ZPRODUCT**	**CHAR**	**2**	**Product ID**
RULE	ZRULE	CHAR	255	Consistency rule
TEXT	ZMSGTEXT	CHAR	255	Inconsistency message text

Fig. 10 Example ZRULE Table